

REMARKS

The Office Action mailed December 29, 2005 has been carefully considered by Applicant. Reconsideration is respectfully requested in view of the foregoing claim amendments and the remarks that follow.

Claim Rejections

Claims 1, 2, 4 and 7 have been rejected under 35 U.S.C. §102(b) as being anticipated by Bridges U.S. Patent No. 5,944,111. Claim 3 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Bridges U.S. Patent No. 5,944,111 in view of Gilles U.S. Patent No. 6,439,321. Claims 5 and 6 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Bridges '111 in view of Gilles '321 and further in view of Gano U.S. Patent No. 4,702,320. Claim 8 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Bridges '111 in view of Vincken et al. U.S. Patent No. 3,681,928.

By the present amendment, claims 1-8 are cancelled and claims 9-23 added to more particularly point out and distinctly claim the subject matter of the present invention, and render the same allowable over the applied references.

Claim 9

Claim 9 recites a device for tensioning and relieving production tubing. The device comprises a tubing tensioner that is disposed below and in proximity of the lower end of a telescopic unit. The tubing tensioner is integrated with the riser and comprises means for maintaining an amount of tension in the production tubing without interrupting production flow through the riser. Such an arrangement is neither taught nor suggested by the cited references.

Bridges '111 discloses an assembly for tensioning an inner riser or casing string. The system includes a hanger (47) landing on an internal load shoulder (51). The hanger includes a gripping mechanism (59) on its lower end engaging a mandrel (31). The mandrel (31) is connected to the inner riser. The hanger is set by means of hydraulic

pressure, while the tensioning of the inner riser is obtained by pulling running tool (27) connected to a drill pipe (84) via a launch adapter (63). The mandrel is thereafter locked to the hanger by means of a ratchet ring (59). Hydraulic pressure is used to move the running tool lock member (35) upwards relative to the mandrel in order to release the tab of lock member from slot (33) in order to unscrew the running tool from the mandrel. The tools used for tensioning the riser according to Bridges '111 have to be retrieved when proper tension is obtained. Thereafter, the riser can be completed by adding conduits above the hanger.

Bridges '111 fails to teach or suggest a tubing tensioner that comprises means for maintaining an amount of tension in the production tubing without interrupting production flow through the riser. In contrast, the assembly of Bridges '111 is only useable when production flow is ceased. Unlike Bridges '111, the present invention allows riser tensioning to be altered at anytime without interrupting flow through the riser. It also does not require dismantling of the riser to connect a tensioner to the hanger, the hanger and the tensioner being combined into one unit.

Gilles '321 discloses an actuator for an orienting device for use in a drill hole during directional drilling. It does not teach a riser, nor does it teach how to hang up and tension an inner riser in an outer riser, per the disclosure of the present invention. The teaching of Gilles '321 is largely irrelevant to the disclosure of the present application. In addition, Gilles '321 fails to teach or suggest a tubing tensioner unit comprising means for maintaining an amount of tension in the production tubing without interrupting production flow through the riser.

Gano et al. '320 discloses a system and method for attaching and removing equipment from a subsea well head in which equipment is lowered and raised on a flexible riser pipe. Cables extend from the equipment to the well head and are winched in and out to control movement of the equipment adjacent the well head. Gano et al. '320 fails to relate to a device for tensioning and relieving production tubing. In addition, Gano et al. '320 does not teach or suggest a tubing tensioner that comprises means for

maintaining an amount of tension in the production tubing without interrupting production flow through the riser.

Vincken et al. '928 also does not teach how to tension a production riser and also fails to teach or suggest a tubing tensioner comprising means for maintaining an amount of tension in the production tubing without interrupting production flow through the riser.

In accordance with the comments provided above, claim 9 is believed allowable over the prior art, including the cited references.

Claim 10

Claim 10 recites a device for tensioning and relieving production tubing that comprises a tubing tensioner unit disposed below and in the proximity of the lower end of a telescopic unit in an upper section of the riser. The tension unit comprises a tubular cylinder and a housing that is integrated into the riser. The tubular cylinder is provided with a plurality of spring-loaded ratchets arranged to engage an annular internal recess formed in a lower face of the housing.

With reference to the discussion of claim 9, Bridges '111 fails to teach or suggest a tubing tensioner unit that is provided with a plurality of spring loaded ratchets arranged to engage an annular internal recess formed in a lower face of the housing. Such arrangement is also neither taught nor suggested by Gamo et al. '320 and Vincken et al. '928.

The Examiner cites Gilles et al. '321 in combination with Bridges '111 and states that it would have been obvious to one of ordinary skill in the art to replace the latch (53) of Bridges with the spring-loaded ratchets (226,228) of Gilles. However, the arrangement of claim 10, which includes the spring-loaded ratchets, is not only significantly different in structure from the arrangements of Bridges and Gilles et al., but is also different in function. The spring-loaded ratchets are arranged to engage annular internal recesses formed in a lower face of the housing. Such arrangement facilitates a counter balance between one or more counter weights and hydraulic pressure in a cylinder chamber below the piston (53) such that tension is properly provided to the production tubing. It would

not have been obvious to one skilled in the art to utilize latches for the purposes set forth in the present application and for the tensioner unit claimed claim 10.

As such, claim 10 is believe allowable over the applied references.

Claims 11-16

Claims 11-16 depend directly or indirectly from claim 10 and are thus believed allowable for the reasons stated above, as well as the subject matter recited therein.

Claim 17

Claim 17 recites a device for tensioning and relieving production tubing. The devices comprises a tubing tensioner comprising a cylinder section and a housing that is integrated into the riser. The cylinder section comprises a piston and a cylinder that are telescopically received by the housing. The cylinder has a plurality of ratchets adapted to engage in annular internal recess formed in a lower inner face of the housing. The piston has an open inner diameter that forms a conduit between the production tubing and the production tubing extension and an outer diameter that is greater than the outer diameter of the production tubing. An inlet for supplying pressurized fluid to the lower chamber of the cylinder is also provided.

The arrangement of claim 17 is neither taught nor suggested by the cited reference for the reasons stated above regarding claims 9 and 10. In addition, the prior art of record fails to teach or suggest the claimed piston having an open inner diameter that forms a conduit between the production tubing and the production tubing extension and an outer diameter that is greater than the outer diameter of the production tubing, and an inlet supplying pressurized fluid to the lower chamber in the cylinder. Such arrangement allows for riser tensioning to be altered at any time without interrupting the flow through the riser. It also does not require any dismantling of the riser to connect the tensioner to the hanger, the hanger and the tensioner being combined in one unit. As stated above, the cited references fail to teach or suggest such structure or function.

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Claims 18-23

Claims 18-23 depend directly or indirectly from claim 17 and thus are believed allowable for the reasons stated above, as well as the subject matter recited therein.

Conclusion

The present application is thus believed in condition for allowance. Such action is respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Peter T. Holsen", written in a cursive style.

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